## STATE THREATENED

FEDERALLY THREATENED

# Loggerhead

(Caretta caretta)

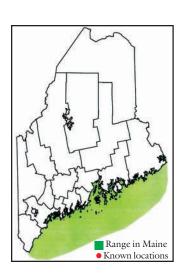


## Description

The loggerhead is the second largest sea turtle, exceeded in length and weight only by the leatherback. Adults are typically 2-3 feet in carapace length and weigh about 300 pounds. The carapace (top shell) is reddish brown and may be tinged with olive, and the edges of the scutes (hard bony shell plates) may be yellow. The plastron (bottom shell) is yellow and hingeless, with two longitudinal ridges that disappear with age. The head varies in color from reddish or yellow-chestnut to olive-brown, and many scales have yellow borders. Skin on the limbs and tail is dark above and yellowish along the borders and below. Males are distinguished by their wider shells that taper toward the rear, a long, thick tail, a large recurved claw on each forelimb, and more yellow pigmentation on the head.

## Range and Habitat

Loggerheads are widely distributed through most of the world's warm oceans. In the western



Atlantic they range northward in the summer as far as Newfoundland, although sightings in the Gulf of Maine are rare. Loggerheads wander widely throughout their range and are found in both inshore and pelagic habitats. Hatchling turtles use driftlines of *Sargassum* (or sea grass) for refuge and food. Subadults use

shallow coastal regions. Along the northern limits of their range they can become cold-stunned and may die from hypothermia. Primary nesting areas in North America are South Carolina, Georgia, and Florida.

## Life History and Ecology

Loggerheads attain sexual maturity at 10-30 years of age and may reproduce for an additional 30 years. In Atlantic waters, nesting may occur from January to September, although peak nesting months are May through July. Adults travel long distances from feeding areas to nesting beaches. Females typically return to nest at 1-7 year intervals at the same beach. Nests are constructed on beaches above the high-tide line typically within 4-5 hours of sunset. The female excavates a nest chamber using her flippers and deposits 45-200 soft, leathery eggs, then buries them and returns to the water. A female may lay up to nine clutches a season separated by intervals of 11-15 days. Incubation lasts 49-76 days. Hatchlings emerge at night and crawl across the beach to the sea.

Loggerheads are omnivorous and prey items include sponges, jellyfish, squid, shrimp, amphipods, sea urchins, and fish. Behavior is affected by water temperature. At temperatures of 13-15°C they become lethargic, at 10°C they adopt a stunned floating posture, and at colder temperatures they may hibernate. When cool they bask on the water surface, and when overheated they seek out cooler waters. Loggerheads may live to be over 60 years old.

#### **Threats**

Sea turtles face many natural obstacles to their

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survival. Predators such as raccoons, ants, and crabs consume eggs in the nest. Hatchlings are eaten by fish, seabirds, and a host of other marine predators. Like other turtle populations, high loss of young is balanced by the longevity of adults. Any additional sources of mortality can cause population declines. The decline of the loggerhead turtle is attributed to increased mortality in shrimp trawls, coastal development, disturbance of nesting females, pollution and marine litter, and increased nest predation. Lights from coastal development discourage nesting adults and disorient hatchlings. New research suggests that a disease now killing many sea turtles (fibropapillomas) may be linked to pollution in the oceans and in nearshore waters. Oil spills, urban runoff of chemicals, fertilizers, and petroleum all contribute to water pollution. Discarded plastic bags and wrappers, helium balloons, and monofilament fishing line that end up in the ocean can also be deadly to sea turtles, as well as to other marine life. Balloons and plastic bags, when floating in water, resemble jellyfish. When turtles mistakenly eat these items or fishing line, their digestive systems become blocked and they eventually die.

## Conservation and Management

Loggerhead populations are declining worldwide, but they are still the most abundant marine turtle in U.S. coastal waters. About 50,000-70,000 nesting females occur in the southeastern U.S. The species was federally listed as threatened in 1978. Before protective measures were implemented in the 1970s, 5,000-15,000 turtles (primarily juveniles) drowned annually in shrimp nets in the southeastern United States.

From 1986-1997, the loggerhead was statelisted as threatened in Maine because of its federal listing status. In 1996, the Maine Legislature changed the Maine Endangered Species Act to discontinue the automatic state-listing of federallylisted species. However, because of an oversight, the loggerhead was the only marine turtle retained on the state list.

#### Recommendations:

The Maine Department of Marine Resources has lead management authority for marine turtles, including the loggerhead, and makes the following recommendations.

- ✓ Loggerheads are rarely encountered in the Gulf of Maine; however, specially designed gear and frequent tending of traps and nets may help to prevent deaths from entanglement.
- ✓ Enforce national and international laws to minimize the dumping of pollutants and solid waste

- into the ocean and nearshore waters. Prohibit overboard discharge of waste in Gulf of Maine waters.
- ✓ Avoid use of balloons, especially in coastal areas. The National Wildlife Federation, Center for Marine Conservation, and other marine conservation groups discourage the use of helium-inflated balloons because they may drift into marine waters and become a hazard to marine wildlife when ingested. More information on the hazards of plastics in the marine environment to marine turtles and whales can be found at <a href="https://www.pacificwhale.org/childrens/fsdebris.html">www.pacificwhale.org/childrens/fsdebris.html</a>.
- ✓ Include in Gulf of Maine marine oil spill contingency plans strategies for rehabilitating oiled marine turtles, especially in late summer.
- ✓ Develop protocols for rescuing and resuscitating cold-stunned sea turtles.
- ✓ To reduce adult mortality in Southeast and Gulf of Mexico fisheries, encourage use of turtle excluder devices (TEDs) and gill net regulations.